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基于社区的红树林生态旅游发展与管理:
印度尼西亚巴厘巴板市 Margomulyo 村试点项目

Community Based Mangrove Ecotourism

Development and Management:

Pilot Project in Margomulyo Village, Balikpapan - Indonesia

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Dedication

This thesis is dedicated to my parents who always give me their unreserved support and unconditional love. They have always supported me all the way since the beginning of my studies. I would like to devote this thesis to them as my present for their 25th Silver Wedding Anniversary. For me, they are the best parents in the whole universe!

I would also like to devote this thesis to Michael Susanto - my significant other, who has continuously given me tremendous support, motivation, encouragement, inspiration, and love. On this special opportunity, I want to dedicate this thesis for him as my present for our “100th *Dayversary*.”

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摘要

红树林生长在陆地和海洋的交互区，它的存在使包括从海星到人类的大量物种得以生存，可能红树林对生命作用比人类所认识到的更重要。红树林生长在边缘地带，它们一部分界于陆地，一部分植根于海洋，这种两栖植物通常占据着燥热、淤泥阻塞以及含盐量高到可以在几小时之内杀死一般植物的区域。红树林形成了地球上最多产和生物多样性最复杂的生态系统，鸟儿在这里栖息，贝壳附着在红树林的根系上，蛇与鳄鱼在红树林中狩猎。红树林还为鱼类提供保育场，为猴子、鹿群、爬树蟹甚至袋鼠提供食物，为蝙蝠和蜜蜂提供甘露与花蜜。红树林仅生长于热带地区，主要在海岸带区域。它对生态系统有重大作用如：保护海岸，每一株红树林树根的沿伸形成的根系就形成了一张温床，它们生成的许多有机物还可以促进礁石生长。

过去，红树林被认为是无用的湿地，许多政府、自然保护组织以及科学家都对研究和保护红树林不感兴趣。致使了自 1980 年以来世界 20% 的红树林的消失。红树林消失的速度比其他林类更快。红树林在世界范围内受到极大威胁。其原因是因为世界人口在增加，特别是热带人口，并且他们逐渐向海岸带区域迁移。海岸带的建设，比如工业、旅游或者鱼虾养殖业的增加，都会影响红树林的生长。红树林被砍伐用于修建盐田、水产养殖池塘、房地产开发、公路、港口设施、酒店、高尔夫场以及农场。石油喷溢、化学污染、沉积物过载以及对红树林生长区域水体和盐度平衡的破坏也都成为红树林死亡的诸多间接原因。

自 2004 年的印度洋海啸事件后，逐渐能听到人们呼唤保护红树林的声音，这种声音虽然稀少但却意义重大。未遭受损坏的红树林，是天然的防波堤，能够消散海浪的冲击力，减少财产损失，甚至可能保护人类的生命。因此，海啸后，人们认为损害红树林这一“生物防护罩”不仅不正确，还应该受到严厉谴责。

现在，随着人们对红树林重要性的了解，印尼等国都计划在海岸带区域重造红树林。自从生态旅游成为一种保护环境的价值工具后，发展红树林生态旅

游也就成为了一种保护红树林的重要方式。实施红树林生态旅游，可以给保护地区的生态系统服务带来经济价值，形成保护地区的直接收入，为当地利益相关者带来直接或间接收入，激励当地社区行动起来保护红树林，建立本地、本国和国际的保护机构，倡导自然资源的可持续利用，减少对生物多样性的威胁。

社区在保证红树林生态旅游成功开展方面发挥着重要作用。这也是为什么当今基于社区的管理模式在生态旅游领域被广泛采用的原因。包括印度尼西亚在内的许多国家都逐渐将这一模式于自然资源管理。

本文使用了生态旅游、可持续发展、海岸带综合管理、区域划分、基于社区的管理等相关概念，通过采用走访、文献资料研究，定性、定量分析，实地调研等方式，研究了印度尼西亚巴厘巴板市 Margomulyo 村基于社区的红树林生态旅游发展与管理模式，得出如下结论：

1. 运用 SWOT 对 Margomulyo 村的红树林保护区进行分析，得出的结论：建立保护区机会大、优势多。首先，社会各界自 2004 年红树林生态保护区建立以来，一直致力于对它的保护，使其面积从建立时的 3.2 公顷扩大到 11 公顷。其次，保护区已经受到法律保护。而保护区最大的问题就在于没有专门的机构对其进行管理，致使垃圾问题（包括固体垃圾和液体垃圾）成为保护区的最大威胁。生物多样性特别是长鼻猴的栖息地为保护区提供了许多有利机会。
2. 分析了 Margomulyo 村红树林保护区的过去、现状，以及其未来发展目标。保护区的总面积在不断扩大并还将继续，红树林的树木量从 3,000 棵增长到 10,000 棵，目标是要超过 20,000 棵，树木增长潜力主要来自于保护设施的修建、保护、教育、生态旅游、研究、改进的管理方式和法律规范的完善等方面。
3. 对在 Margomulyo 村红树林保护区开展生态旅游进行可行性分析，得出结论：第一，根据 SWOT 分析可知，在 Margomulyo 村红树林保护区选址开展生态旅游是非常有潜力的；第二，通过对巴厘巴板市生态旅行者的评估，认为将会有许多生态旅行者到访红树林生态旅游地。

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4. 认为要在 Margomulyo 村成功建立红树林生态旅游区，还必须考虑来自经济、社会和生态三方面的影响。这三者密切联系，不可分割，因此，必须同时进行，三者兼顾。
 5. 运用海岸带综合管理来使生态、经济和社会目标相互协调，再将这三个目标在保护规划和管理方式中进行整合，以形成良好的、可持续发展的海岸带（本文主要指红树林）管理方式，通过预期来减少生态、经济和社会目标因为哪一目标实现利益较多和谁优先实现等造成的问题和争议。
 6. 研究了为 Margomulyo 村红树林生态旅游选址的行动计划，行动计划可以分为三步：试实施阶段—主要处理社会方面的问题，正式实施阶段—处理环境方面的问题，实施后阶段—主要处理经济方面的问题。
 7. 对 Margomulyo 村红树林保护区选址开展生态旅游进行分区。总体规划是将其分为三个区域：缓冲区（4.5 公顷），保留区（3.2 公顷）和限制使用区（12.3 公顷）。
 8. 基于社区的红树林生态旅游管理机制：政府、非政府组织、私人企业和当地社区进行合作，横向（部门间的）和纵向（自上而下地）协调，经常向社会公众、立法机构和专家咨询。
 9. 开展红树林生态旅游对环境有许多好处：可以促进经济发展，增强人们的环境意识，促进相关领域的教育和研究，提升城市地位。
 10. 文章勾勒出了基于社区的管理模式大体框架结构，以便在 Margomulyo 村红树林生态旅游实施。
 11. 建立了基于社区的管理模型，对 Margomulyo 村红树林生态旅游管理的组织结构提出了建议。
 12. 通过对生态旅游者满意度、当地的社会福利、环境水平、未来建设能力和政府、私人部门角色的讨论，得出基于红树林生态旅游管理的可持续社区的实现方式。

关键词：基于社区的管理；红树林生态旅游；基于社区的红树林生态旅游；红树林区域划分；巴厘巴板；印度尼西亚。

Executive Summary

At the intersection of land and sea, mangrove forests support a wealth of life, from starfish to people, and may be more important to the health of the planet than we ever realized. Mangroves live life on the edge. With one foot on land and one in the sea, these botanical amphibians occupy a zone of desiccating heat, choking mud, and salt levels that would kill an ordinary plant within hours. Yet the forests mangroves form are among the most productive and biologically complex ecosystems on Earth. Birds roost in the canopy, shellfish attach themselves to the roots, and snakes and crocodiles come to hunt. Mangroves provide nursery grounds for fish; a food source for monkeys, deer, tree-climbing crabs, even kangaroos; and a nectar source for bats and honeybees.

Mangroves grow only in the tropics and mainly in coastal areas. Mangrove forests have an important function in our ecosystem as natural coastal protection; the extended root systems of every mangrove tree are a nursery. Furthermore, they produce a lot of organic material to feed the reefs as well.

In the past, mangrove were considered useless swamps, so many governments, nature preservation organizations, and scientists were not really that interested in protecting and researching the mangrove forests. As a result, this world has lost 20% of its total mangrove area since 1980. The fact is, the rate of mangrove loss is higher than the loss of any other forest type. Thus, mangroves are under threat worldwide. Why would this happen? There are more people on our planet, especially in the tropics, and many of them are moving to coastal areas. More coastal developments, such as industry, tourism, or intensive shrimp farming, did a lot of damage to the mangroves worldwide. Mangroves are sacrificed for salt pans, aquaculture ponds, housing developments, roads, port facilities, hotels, golf courses, and farms. And they die from a thousand indirect cuts: oil spills, chemical pollution, sediment overload, and disruption of their sensitive water and salinity balance.

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